WESTERN BOUNDARY WATER BULLETIN - 2001 - INTERNATIONAL BOUNDARY AND WATER COMMISSION

11-0100.00 COTTONWOOD CREEK ABOVE MORENA DAM, CALIFORNIA

DESCRIPTION: Staff gage located on east side of outlet tower immediately upstream from face of Morena Dam. The dam is located on Cottonwood Creek 2.9 kilometers upstream from the mouth of Hauser Creek, 13.7 kilometers upstream from Barrett Dam, and about 32.2 kilometers upstream from the international boundary. The zero of the gage is 878.555 meters above mean sea level, U. S. C. & G. S. datum.

RECORDS: Reservoir inflows shown below were computed from monthly reservoir records of storage, releases, spills, leakage, evaporation, and rainfall, by the International Boundary and Water Commission, United States Section. They represent all water reaching Morena Reservoir, including rainfall on reservoir water surface. Basic data were furnished by the City of San Diego, California. Records April 1911 through 2001.

REMARKS: Storage began in Morena Reservoir March 1910. Reservoir capacity and area ratings date from 1910 when Morena Dam was completed. Records for 2001 computed on basis of area-capacity curves determined from 1948 resurvey. Various changes have been made to the spillway section since construction of the dam. Elevation of the present crest of ungated spillway is 47.855 meters, gage datum. Reservoir capacity at spillway crest, 1948 survey, is 61,934 TCM. The entire capacity of Morena Reservoir is used to furnish a part of the water supply of the City of San Diego, California. Water is released from Morena Reservoir down Cottonwood Creek to Barrett Reservoir as required.

EXTREMES: Maximum monthly inflow since 1937, 55,845 TCM, March 1983. Prior to 1937, maximum monthly inflow, 45,886 TCM, January 1916; minimum no flow during parts of many years.

MONTHLY DISCHARGE IN THOUSAND CUBIC METERS

	CURRENT YEAR 2001	PERIOD 1937 - 2001		
		AVERAGE	MAXIMUM	MINIMUM
] January	175	1,205	20,362	0
February	188	2,580	41,407	9.9
March	472	3,494	55,845	23.8
April	797	2,052	28,530	4.1
May	1,192	1,030	18,642	0
June	768	584	10,173	0
July	860	363	7,651	0
August	345	275	8,916	0
September	197	190	6,331	0
October	128	165	4,817	0
November	112	272	5,633	0
December	76.2	736	9,472	5.4
Yearly][5,310][][12,946][][177,579][] 149]